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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Fumihiko IWATA; Masashi ASAKAWA; Akihiro SATO; Akira MOCHIDA; Koki TOGASHI

Application No.: U.S. National Stage of
PCT/JP01/02968

Filed: November 30, 2001 Docket No.: 111227

For: CONTROL OF DISTRIBUTED PRINTING WITH MULTIPLE PRINTERS

PRELIMINARY AMENDMENT

Director of the U.S. Patent and Trademark Office
Washington, D. C. 20231

Sir:

Prior to initial examination, please amend the above-identified application as follows:

IN THE CLAIMS:

Please replace claims 4, 6, 7, 9, 10, 16, 18, 19, 23, 26, 27, 29, 30, 33, 37, 39, 48, 49-
51, 53, 57, 62, 64, 65, 68, 70-72, 74, 75, 78, 82- 85, 88, 90- 92, 94 and 95 as follows:

4. (Amended) A distributed printing control apparatus in accordance with claim 1,
said distributed printing control apparatus further comprising: a virtual printer printing
information setting module that displays an input window on a display device and sets
various pieces of information required for printing with said virtual printer, based on input
data from an input device like a mouse and a keyboard.

6. (Amended) A distributed printing control apparatus in accordance with claim 4,
said distributed printing control apparatus further comprising: a real printer printing
information setting module that is individually provided for each of said plurality of printers

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connected to said distributed printing control apparatus to set various pieces of information required for printing with said each printer; and a display control module that displays a display window on said display device, the display window including a plurality of icons for individually activating said real printer printing information setting modules and an icon for activating said virtual printer printing information setting module.

7. (Amended) A distributed printing control apparatus in accordance with claim 1, said distributed printing control apparatus further comprising: a distribution information setting module that displays an input window for distribution of the print data and sets various pieces of information required for distributing the print data into said plurality of printers, based on the input data from said input device; and a print data distribution module that distributes the print data into said plurality of printers, based on the various pieces of information set by said distribution information setting module.

9. (Amended) A distributed printing control apparatus in accordance with claim 1, wherein the intermediate print data obtained by said intermediate print data generation module is temporarily registered as an intermediate print file in an external storage device.

10. (Amended) A distributed printing control apparatus in accordance with claim 1, wherein said plurality of printers are connected to said distributed printing control apparatus via a computer network.

16. (Amended) A computer readable recording medium in accordance with claim 13, wherein said computer program further causes the computer to attain the function of: (e) displaying an input window on a display device and setting various pieces of information required for printing with said virtual printer, based on input data from an input device like a mouse and a keyboard.

18. (Amended) A computer readable recording medium in accordance with claim 16, wherein said computer program further causes the computer to attain the functions of: (f)

setting various pieces of information required for printing with each of said plurality of printers connected to said distributed printing control apparatus, said function (f) being individually set for said each printer; and (g) displaying a display window on said display device, the display window including a plurality of icons for individually activating said functions (f) and an icon for activating said function (e).

19. (Amended) A computer readable recording medium in which a computer program used in a distributed printing control apparatus is recorded, said distributed printing control apparatus connecting with a plurality of computers, distributing print data of interest, which is generated by an application program and is to be printed, into a plurality of printers, converting the distributed print data into output data suitable for each of said printers via a printer driver provided for said each printer, and transmitting the converted output data to said each printer, said computer program causing a computer to attain at least one function corresponding to the structure of a distributed printing control apparatus in accordance with claim 7.

23. (Amended) A distributed printing control apparatus in accordance with claim 21, wherein the intermediate print data obtained by said intermediate print data generation module is temporarily registered as an intermediate print file in an external storage device.

26. (Amended) A distributed printing control apparatus in accordance with claim 21, said distributed printing control apparatus further comprising: a performance information collecting module that collects information regarding performances of each of said plurality of printers from a printer driver provided for said each printer; and an identity decision module that determines that said plurality of printers are of the identical type, based on the performances of said plurality of printers collected by said performance information collecting module.

27. (Amended) A distributed printing control apparatus in accordance with claim 21, said distributed printing control apparatus further comprising: a distribution information setting module that displays an input window for distribution of the print data and sets various pieces of information required for distributing the print data into said plurality of printers, based on input data from an input device, wherein said print data allocation module allocates the intermediate print data, based on the various pieces of information set by said distribution information setting module.

29. (Amended) A distributed printing control apparatus in accordance with claim 27, wherein the intermediate print data obtained by said intermediate print data generation module is specified as an intermediate print file and is temporarily registered, together with the various pieces of information set by said distribution information setting module, in an external storage device.

30. (Amended) A distributed printing control apparatus in accordance with claim 21, wherein at least one of said plurality of printers is connected to said distributed printing control apparatus via a computer network.

33. (Amended) A distributed printing control method that distributes print data of interest, which is generated by an application program and is to be printed, into a plurality of printers and outputs the distributed print data to each of said plurality of printers via a printer driver corresponding to a type of said each printer, said distributed printing control method comprising at least one step corresponding to the structure of a distributed printing control apparatus in accordance with claim 22.

37. (Amended) A computer readable recording medium in accordance with claim 35, wherein the intermediate print data obtained by said function (b) is temporarily registered as an intermediate print file in an external storage device.

39. (Amended) A computer readable recording medium in accordance with claim 35, wherein said computer program further causes the computer to attain the functions of: (e) displaying an input window for distribution of the print data and setting various pieces of information required for distributing the print data into said plurality of printers, based on input data from an input device, where said function (c) allocates the intermediate print data, based on the various pieces of information set in said step (e); and (f) specifying the intermediate print data obtained by said function (b) as an intermediate print file and outputting the intermediate print file together with the various pieces of information set in said step (e) to an external storage device.

48. (Amended) A distributed printing control apparatus in accordance with claim 46, wherein said second control module allocates an order of collection to the respective printers by considering a sequence of collected resulting prints and displays the allocation in the window.

49. (Amended) A distributed printing control apparatus in accordance with claim 46, wherein said second control module displays in the window a switch for activating another cycle of distributed printing after conclusion of one cycle of distributed printing.

50. (Amended) A distributed printing control apparatus in accordance with claim 44, wherein the allocation information with regard to multiple print jobs, each representing the print data, is simultaneously displayed in the window.

51. (Amended) A distributed printing control apparatus in accordance with claim 44, said distributed printing control apparatus comprising: a distribution information setting module that displays an input window on said display device and sets diverse pieces of information with regard to distribution of the print data, based on input data from an input device, wherein the allocation information is specified, based on the diverse pieces of information set by said distribution information setting module.

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53. (Amended) A distributed printing control method that groups print data of interest, which is to be printed, by a predetermined unit, specifies allocation of respective grouped parts of the print data to a plurality of printers as allocation information, and outputs the print data to said plurality of printers in a distributive manner based on the allocation information, said distributed printing control method comprising at least one step corresponding to the structure of a distributed printing control apparatus in accordance with claim 45.

57. (Amended) A computer readable recording medium in which a computer program used in a distributed printing control apparatus is recorded, said distributed printing control apparatus grouping print data of interest, which is to be printed, by a predetermined unit, specifying allocation of respective grouped parts of the print data to a plurality of printers as allocation information, and outputting the print data to said plurality of printers in a distributive manner based on the allocation information, said computer program causing a computer to attain at least one function corresponding to the structure of a distributed printing control apparatus in accordance with claim 47.

62. (Amended) A distributed printing control apparatus in accordance with claim 59, said distributed printing control apparatus further comprising: a monitor module that monitors occurrence of any trouble in each of the multiple printers specified by said printer specification module, wherein said distribution control module comprises an after-start-of-printing alternative control module, when said monitor module detects occurrence of any trouble in any of the multiple printers during a time period between a start of distributed output of the print data and completion of printing with each printer, outputs non-printed page data, which is included in a distributed portion of the print data output to the printer with the trouble, to the alternative printer.

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64. (Amended) A distributed printing control apparatus in accordance with claim 59, said distributed printing control apparatus further comprising: a monitor module that monitors occurrence of any trouble in each of the multiple printers specified by said printer specification module, wherein said distribution control module comprises a before-printing alternative control module, when said monitor module detects occurrence of any trouble in any of the multiple printers prior to a start of distributed output of the print data, outputs a portion of the print data, which is expected to be output to the printer with the trouble, to the alternative printer.

65. (Amended) A distributed printing control apparatus in accordance with claim 59, wherein said distribution control module comprises: a printer reselection module that, when any trouble arises in the alternative printer, selects one printer immediately available for printing among all the printers except the printer with the trouble; and a module that outputs a portion of the print data in a distributive manner to the printer selected by said printer reselection module as a new alternative printer.

68. (Amended) A distributed printing control apparatus in accordance with claim 66, wherein said candidate printer selection module comprises: a first selection module that selects a printer of an identical type with a type of the printer with the trouble, among all the printers except the printer with the trouble; and a second selection module that, when no printer is selected by said first selection module, selects a printer having a printing performance close to that of the printer with the trouble, among all the printers except the printer with the trouble.

70. (Amended) A distributed printing control apparatus in accordance with claim 66, wherein said candidate printer selection module comprises: a speed preference decision module that determines whether or not a speed preference mode is set for distributed printing; and an under-speed-preference-mode selection module that selects one available printer

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regardless of type of the printer, when said speed preference decision module gives an affirmative answer.

71. (Amended) A distributed printing control apparatus in accordance with claim 66, wherein said alternative printer selection module comprises: a module that selects a printer of a highest printing speed among the at least one printer selected by said candidate printer selection module.

72. (Amended) A distributed printing control apparatus in accordance with claim 59, said distributed printing control apparatus further comprising: a display control module that displays a name of the printer selected by said alternative printer selection module on a display device.

74. (Amended) A distributed printing control apparatus in accordance with claim 72, said distributed printing control apparatus further comprising: a module that causes said display control module to give a display when the distributed printing of the print data is concluded.

75. (Amended) A distributed printing control apparatus in accordance with claim 59, wherein said distribution control module comprises: a module that corrects the print data to make a resulting print obtained from the alternative printer substantially similar to a resulting print expected from the printer with the trouble, when the alternative printer is of a different type from a type of the printer with the trouble.

78. (Amended) A distributed printing control method that outputs print data of interest, which is to be printed, to multiple printers in a distributive manner, said distributed printing control method comprising at least one step corresponding to the structure of a distributed printing control apparatus in accordance with claim 61.

82. (Amended) A computer readable recording medium in accordance with claim 79, wherein said computer program causes the computer to further attain the function of: (d)

monitoring occurrence of any trouble in each of the multiple printers specified by said function (a), said function (b) further comprising the function of: (b3) when occurrence of any trouble is detected by said function (d) in any of the multiple printers during a time period between a start of distributed output of the print data and completion of printing with each printer, outputting non-printed page data, which is included in a distributed portion of the print data output to the printer with the trouble, to the alternative printer.

83. (Amended) A computer readable recording medium in accordance with claim 82, wherein said function (b3) outputs page data, which represents a message showing replacement of the printer, to the alternative printer.

84. (Amended) A computer readable recording medium in accordance with claim 79, wherein said computer program causes the computer to further attain the function of: (d) monitoring occurrence of any trouble in each of the multiple printers specified by said function (a), said function (b) further comprising the function of: (b3) when occurrence of any trouble is detected by said function (d) in any of the multiple printers prior to a start of distributed output of the print data, outputting a portion of the print data, which is expected to be output to the printer with the trouble, to the alternative printer.

85. (Amended) A computer readable recording medium in accordance with claim 79, wherein said function (b) further comprises the functions of: (b3) when any trouble arises in the alternative printer, selecting one printer immediately available for printing among all the printers except the printer with the trouble; and (b4) outputting a portion of the print data in a distributive manner to the printer selected by said function (b3) as a new alternative printer.

88. (Amended) A computer readable recording medium in accordance with claim 86, wherein said function (b11) comprises the functions of: (b111) selecting a printer of an identical type with a type of the printer with the trouble, among all the printers except the printer with the trouble; and (b112) when no printer is selected by said function (b111),

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selecting a printer having a printing performance close to that of the printer with the trouble, among all the printers except the printer with the trouble.

90. (Amended) A computer readable recording medium in accordance with claim 86, wherein said function (b11) further comprises the functions of: determining whether or not a speed preference mode is set for distributed printing; and selecting one available printer regardless of type of the printer, when it is determined that the speed preference mode is set.

91. (Amended) A computer readable recording medium in accordance with claim 86, wherein said function (b12) further comprises the function of: selecting a printer of a highest printing speed among the at least one printer selected by said function (b11).

92. (Amended) A computer readable recording medium in accordance with claim 79, wherein said computer program causes the computer to further attain the function of: (d) displaying a name of the printer selected by said function (b12) on a display device.

94. (Amended) A computer readable recording medium in accordance with claim 92, wherein said computer program causes the computer to further attain the function of: activating said function (d) to give a display when the distributed printing of the print data is concluded.

95. (Amended) A computer readable recording medium in accordance with claim 79, wherein said function (b) further comprises the function of: correcting the print data to make a resulting print obtained from the alternative printer substantially similar to a resulting print expected from the printer with the trouble, when the alternative printer is of a different type from a type of the printer with the trouble.

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REMARKS

Claims 1 - 96 are pending. By this Preliminary Amendment, claims 4, 6, 7, 9, 10, 16, 18, 19, 23, 26, 27, 29, 30, 33, 37, 39, 48, 49-51, 53, 57, 62, 64, 65, 68, 70-72, 74, 75, 78, 82-85, 88, 90- 92, 94 and 95 are amended to remove multiple dependencies. Prompt and favorable examination on the merits is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. 1.121(c)(1)(ii)).

Respectfully submitted,



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JAO:EDM/kaf

Attachment:
Appendix

Date: November 30, 2001

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DEPOSIT ACCOUNT USE
AUTHORIZATION
Please grant any extension
necessary for entry;
Charge any fee due to our
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Docket No. 111227

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APPENDIX

Changes to Claims:

The following are marked-up versions of the amended claims:

4. (Amended) A distributed printing control apparatus in accordance with ~~any one of~~ claims ~~1 to 3~~ claim 1, said distributed printing control apparatus further comprising: a virtual printer printing information setting module that displays an input window on a display device and sets various pieces of information required for printing with said virtual printer, based on input data from an input device like a mouse and a keyboard.

6. (Amended) A distributed printing control apparatus in accordance with ~~either one of~~ ~~claims 4 and 5~~ claim 4, said distributed printing control apparatus further comprising: a real printer printing information setting module that is individually provided for each of said plurality of printers connected to said distributed printing control apparatus to set various pieces of information required for printing with said each printer; and a display control module that displays a display window on said display device, the display window including a plurality of icons for individually activating said real printer printing information setting modules and an icon for activating said virtual printer printing information setting module.

7. (Amended) A distributed printing control apparatus in accordance with ~~any one of~~ claims ~~1 to 6~~ claim 1, said distributed printing control apparatus further comprising: a distribution information setting module that displays an input window for distribution of the print data and sets various pieces of information required for distributing the print data into said plurality of printers, based on the input data from said input device; and a print data distribution module that distributes the print data into said plurality of printers, based on the various pieces of information set by said distribution information setting module.

9. (Amended) A distributed printing control apparatus in accordance with ~~any one of~~ claims ~~1 to 8~~ claim 1, wherein the intermediate print data obtained by said intermediate print

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data generation module is temporarily registered as an intermediate print file in an external storage device.

10. (Amended) A distributed printing control apparatus in accordance with any one of claims 1 to 9 claim 1, wherein said plurality of printers are connected to said distributed printing control apparatus via a computer network.

16. (Amended) A computer readable recording medium in accordance with ~~any one of claims 13 to 15~~ claim 13, wherein said computer program further causes the computer to attain the function of: (e) displaying an input window on a display device and setting various pieces of information required for printing with said virtual printer, based on input data from an input device like a mouse and a keyboard.

18. (Amended) A computer readable recording medium in accordance with either one of claims 16 and 17 claim 16, wherein said computer program further causes the computer to attain the functions of: (f) setting various pieces of information required for printing with each of said plurality of printers connected to said distributed printing control apparatus, said function (f) being individually set for said each printer; and (g) displaying a display window on said display device, the display window including a plurality of icons for individually activating said functions (f) and an icon for activating said function (e).

19. (Amended) A computer readable recording medium in which a computer program used in a distributed printing control apparatus is recorded, said distributed printing control apparatus connecting with a plurality of computers, distributing print data of interest, which is generated by an application program and is to be printed, into a plurality of printers, converting the distributed print data into output data suitable for each of said printers via a printer driver provided for said each printer, and transmitting the converted output data to said each printer, said computer program causing a computer to attain at least one function

corresponding to the structure of a distributed printing control apparatus in accordance with any one of claims 7 to 10 claim 7.

23. (Amended) A distributed printing control apparatus in accordance with either one of claims 21 and 22 claim 21, wherein the intermediate print data obtained by said intermediate print data generation module is temporarily registered as an intermediate print file in an external storage device.

26. (Amended) A distributed printing control apparatus in accordance with any one of claims 21 to 25 claim 21, said distributed printing control apparatus further comprising: a performance information collecting module that collects information regarding performances of each of said plurality of printers from a printer driver provided for said each printer; and an identity decision module that determines that said plurality of printers are of the identical type, based on the performances of said plurality of printers collected by said performance information collecting module.

27. (Amended) A distributed printing control apparatus in accordance with any one of claims 21 to 26 claim 21, said distributed printing control apparatus further comprising: a distribution information setting module that displays an input window for distribution of the print data and sets various pieces of information required for distributing the print data into said plurality of printers, based on input data from an input device, wherein said print data allocation module allocates the intermediate print data, based on the various pieces of information set by said distribution information setting module.

29. (Amended) A distributed printing control apparatus in accordance with either one of claims 27 and 28 claim 27, wherein the intermediate print data obtained by said intermediate print data generation module is specified as an intermediate print file and is temporarily registered, together with the various pieces of information set by said distribution information setting module, in an external storage device.

30. (Amended) A distributed printing control apparatus in accordance with ~~any one of claims 21 to 29~~ claim 21, wherein at least one of said plurality of printers is connected to said distributed printing control apparatus via a computer network.

33. (Amended) A distributed printing control method that distributes print data of interest, which is generated by an application program and is to be printed, into a plurality of printers and outputs the distributed print data to each of said plurality of printers via a printer driver corresponding to a type of said each printer, said distributed printing control method comprising at least one step corresponding to the structure of a distributed printing control apparatus in accordance with ~~any one of claims 22 to 30~~ claim 22.

37. (Amended) A computer readable recording medium in accordance with ~~either one of claims 35 and 36~~ claim 35, wherein the intermediate print data obtained by said function (b) is temporarily registered as an intermediate print file in an external storage device.

39. (Amended) A computer readable recording medium in accordance with ~~any one of claims 35 to 38~~ claim 35, wherein said computer program further causes the computer to attain the functions of: (e) displaying an input window for distribution of the print data and setting various pieces of information required for distributing the print data into said plurality of printers, based on input data from an input device, where said function (c) allocates the intermediate print data, based on the various pieces of information set in said step (e); and (f) specifying the intermediate print data obtained by said function (b) as an intermediate print file and outputting the intermediate print file together with the various pieces of information set in said step (e) to an external storage device.

48. (Amended) A distributed printing control apparatus in accordance with ~~either one of claims 46 and 47~~ claim 46, wherein said second control module allocates an order of collection to the respective printers by considering a sequence of collected resulting prints and displays the allocation in the window.

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49. (Amended) A distributed printing control apparatus in accordance with ~~either one of claims 46 and 47~~ claim 46, wherein said second control module displays in the window a switch for activating another cycle of distributed printing after conclusion of one cycle of distributed printing.

50. (Amended) A distributed printing control apparatus in accordance with ~~any one of claims 44 to 49~~ claim 44, wherein the allocation information with regard to multiple print jobs, each representing the print data, is simultaneously displayed in the window.

51. (Amended) A distributed printing control apparatus in accordance with ~~any one of claims 44 to 50~~ claim 44, said distributed printing control apparatus comprising: a distribution information setting module that displays an input window on said display device and sets diverse pieces of information with regard to distribution of the print data, based on input data from an input device, wherein the allocation information is specified, based on the diverse pieces of information set by said distribution information setting module.

53. (Amended) A distributed printing control method that groups print data of interest, which is to be printed, by a predetermined unit, specifies allocation of respective grouped parts of the print data to a plurality of printers as allocation information, and outputs the print data to said plurality of printers in a distributive manner based on the allocation information, said distributed printing control method comprising at least one step corresponding to the structure of a distributed printing control apparatus in accordance with ~~any one of claims 45 to 51~~ claim 45.

57. (Amended) A computer readable recording medium in which a computer program used in a distributed printing control apparatus is recorded, said distributed printing control apparatus grouping print data of interest, which is to be printed, by a predetermined unit, specifying allocation of respective grouped parts of the print data to a plurality of printers as allocation information, and outputting the print data to said plurality of printers in

a distributive manner based on the allocation information, said computer program causing a computer to attain at least one function corresponding to the structure of a distributed printing control apparatus in accordance with ~~any one of claims 47 to 51~~ claim 47.

62. (Amended) A distributed printing control apparatus in accordance with ~~any one of claims 59 to 61~~ claim 59, said distributed printing control apparatus further comprising: a monitor module that monitors occurrence of any trouble in each of the multiple printers specified by said printer specification module, wherein said distribution control module comprises an after-start-of-printing alternative control module, when said monitor module detects occurrence of any trouble in any of the multiple printers during a time period between a start of distributed output of the print data and completion of printing with each printer, outputs non-printed page data, which is included in a distributed portion of the print data output to the printer with the trouble, to the alternative printer.

64. (Amended) A distributed printing control apparatus in accordance with ~~any one of claims 59 to 61~~ claim 59, said distributed printing control apparatus further comprising: a monitor module that monitors occurrence of any trouble in each of the multiple printers specified by said printer specification module, wherein said distribution control module comprises a before-printing alternative control module, when said monitor module detects occurrence of any trouble in any of the multiple printers prior to a start of distributed output of the print data, outputs a portion of the print data, which is expected to be output to the printer with the trouble, to the alternative printer.

65. (Amended) A distributed printing control apparatus in accordance with ~~any one of claims 59 to 61~~ claim 59, wherein said distribution control module comprises: a printer reselection module that, when any trouble arises in the alternative printer, selects one printer immediately available for printing among all the printers except the printer with the trouble;

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and a module that outputs a portion of the print data in a distributive manner to the printer selected by said printer reselection module as a new alternative printer.

68. (Amended) A distributed printing control apparatus in accordance with either one-of-claims 66 and 67 claim 66, wherein said candidate printer selection module comprises: a first selection module that selects a printer of an identical type with a type of the printer with the trouble, among all the printers except the printer with the trouble; and a second selection module that, when no printer is selected by said first selection module, selects a printer having a printing performance close to that of the printer with the trouble, among all the printers except the printer with the trouble.

70. (Amended) A distributed printing control apparatus in accordance with any one-of-claims 66 to 69 claim 66, wherein said candidate printer selection module comprises: a speed preference decision module that determines whether or not a speed preference mode is set for distributed printing; and an under-speed-preference-mode selection module that selects one available printer regardless of type of the printer, when said speed preference decision module gives an affirmative answer.

71. (Amended) A distributed printing control apparatus in accordance with any one-of-claims 66 to 70 claim 66, wherein said alternative printer selection module comprises: a module that selects a printer of a highest printing speed among the at least one printer selected by said candidate printer selection module.

72. (Amended) A distributed printing control apparatus in accordance with any one-of-claims 59 to 64 claim 59, said distributed printing control apparatus further comprising: a display control module that displays a name of the printer selected by said alternative printer selection module on a display device.

74. (Amended) A distributed printing control apparatus in accordance with either one-of-claims 72 and 73 claim 72, said distributed printing control apparatus further comprising: a

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module that causes said display control module to give a display when the distributed printing of the print data is concluded.

75. (Amended) A distributed printing control apparatus in accordance with ~~any one of claims 59 to 61~~ claim 59, wherein said distribution control module comprises: a module that corrects the print data to make a resulting print obtained from the alternative printer substantially similar to a resulting print expected from the printer with the trouble, when the alternative printer is of a different type from a type of the printer with the trouble.

78. (Amended) A distributed printing control method that outputs print data of interest, which is to be printed, to multiple printers in a distributive manner, said distributed printing control method comprising at least one step corresponding to the structure of a distributed printing control apparatus in accordance with ~~any one of claims 61 to 75~~ claim 61.

82. (Amended) A computer readable recording medium in accordance with ~~any one of claims 79 to 81~~ claim 79, wherein said computer program causes the computer to further attain the function of: (d) monitoring occurrence of any trouble in each of the multiple printers specified by said function (a), said function (b) further comprising the function of: (b3) when occurrence of any trouble is detected by said function (d) in any of the multiple printers during a time period between a start of distributed output of the print data and completion of printing with each printer, outputting non-printed page data, which is included in a distributed portion of the print data output to the printer with the trouble, to the alternative printer.

83. (Amended) A computer readable recording medium in accordance with ~~claim 83~~ claim 82, wherein said function (b3) outputs page data, which represents a message showing replacement of the printer, to the alternative printer.

84. (Amended) A computer readable recording medium in accordance with ~~any one of claims 79 to 81~~ claim 79, wherein said computer program causes the computer to further

attain the function of: (d) monitoring occurrence of any trouble in each of the multiple printers specified by said function (a), said function (b) further comprising the function of: (b3) when occurrence of any trouble is detected by said function (d) in any of the multiple printers prior to a start of distributed output of the print data, outputting a portion of the print data, which is expected to be output to the printer with the trouble, to the alternative printer.

85. (Amended) A computer readable recording medium in accordance with ~~any one of claims 79 to 81~~ claim 79, wherein said function (b) further comprises the functions of: (b3) when any trouble arises in the alternative printer, selecting one printer immediately available for printing among all the printers except the printer with the trouble; and (b4) outputting a portion of the print data in a distributive manner to the printer selected by said function (b3) as a new alternative printer.

88. (Amended) A computer readable recording medium in accordance with ~~either one of claims 86 and 87~~ claim 86, wherein said function (b11) comprises the functions of: (b11) selecting a printer of an identical type with a type of the printer with the trouble, among all the printers except the printer with the trouble; and (b112) when no printer is selected by said function (b11), selecting a printer having a printing performance close to that of the printer with the trouble, among all the printers except the printer with the trouble.

90. (Amended) A computer readable recording medium in accordance with ~~any one of claims 86 to 89~~ claim 86, wherein said function (b11) further comprises the functions of: determining whether or not a speed preference mode is set for distributed printing; and selecting one available printer regardless of type of the printer, when it is determined that the speed preference mode is set.

91. (Amended) A computer readable recording medium in accordance with ~~any one of claims 86 to 90~~ claim 86, wherein said function (b12) further comprises the function of:

selecting a printer of a highest printing speed among the at least one printer selected by said function (b11).

92. (Amended) A computer readable recording medium in accordance with ~~any one of claims 79 to 81~~ claim 79, wherein said computer program causes the computer to further attain the function of: (d) displaying a name of the printer selected by said function (b12) on a display device.

94. (Amended) A computer readable recording medium in accordance with ~~either one of claims 92 and 93~~ claim 92, wherein said computer program causes the computer to further attain the function of: activating said function (d) to give a display when the distributed printing of the print data is concluded.

95. (Amended) A computer readable recording medium in accordance with ~~any one of claims 79 to 81~~ claim 79, wherein said function (b) further comprises the function of: correcting the print data to make a resulting print obtained from the alternative printer substantially similar to a resulting print expected from the printer with the trouble, when the alternative printer is of a different type from a type of the printer with the trouble.